## **EUROPEAN PATENT OFFICE**

## **Patent Abstracts of Japan**

**PUBLICATION NUMBER** 09163990 24-06-97 PUBLICATION DATE

APPLICATION DATE 27-09-96

APPLICATION NUMBER 08256747

GCC TCG TCC TCC TCG TCT TCT GCC AGT GAG ATC ATC GAA GCG CCG 222 Ala Ser Ser Ser Ser Ser Ser Ser Ser Ala Ser Glu Met Ile Giu Ala Pro

APPLICANT: CHUGAI PHARMACEUT CO LTD; 10 15

TCG CAG GTC CTS AAC TTG GAA GAG ATC GAC TAC AAG GAG ATC GAG GTG Ser Gla Val Leu Asa Phe Gla Gla He Asp Tyr Lys Gla He Gla Val

INVENTOR: IRIE KENJI; 30

: C12N 15/09 C07H 21/04 C12N 9/12 INT.CL.

> //(C12N 9/12 , C12R 1:91 ), (C12N 9/12 , C12R 1:685 ), (C12N 9/12

C12R 1:865 ), (C12N 9/12 , C12R

1:19 )

Asn Lys Ser Leu Ser The Tyr Tyr Gla Gla Cys Lys Lys Glo Leu Glu 560 555

GTC ATC AGA AGC CAA CAG CAG AAA CGA CAA GGC ACT TCA TGATTCTCTG

MAC AMA ACC CIT TOT ACT TAT TAC CAG CAM TEC AMA AMA CAM CITA GAG

ATG TOG ACA GCC TCC GCC Met Ser Thr Ala Ser Ala

1

Val Ile Arg Ser Gin Gin Gin Lys Arg Gin Gly Thr Ser 670

NEW KINASE BEARING INFORMATION TITLE

TRANSMISSION SYSTEM OF

TGF-BETA FAMILY

ABSTRACT: PROBLEM TO BE SOLVED: To obtain a new DNA coding a kinase-active polypeptide

subject to activation by a transforming growth factor-β having a specific amino acid sequence, and to be used for e.g. producing enzymes useful for retrieving medicinal

agents suppressing or promoting information transmission.

SOLUTION: This new DNA is such one as to code a kinase-active polypeptide subject to activation by a transforming growth factor-β (TGF-β) having the amino acid sequence covering the 23rd Ser through 579th Ser of an amino acid sequence of the formula, or an amino acid sequence modified by addition or elimination of one to several amino acids to or from the above partial amino acid sequence, and/or by substitution with other amino acid(s). This DNA is useful for e.g. producing kinase-active polypeptides useful for e.g. retrieving medicinal agents suppressing or promoting cell information transmission. This new DNA is obtained by screening with a probe a cDNA library prepared by using a mRNA collected from a mouse interleukin-3 dependent cell system.

COPYRIGHT: (C)1997,JPO